

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended): A computer-implemented method of associating an
2 electronic signature with an electronic record ~~in a computer system~~, the method comprising:
3 receiving, at a computer system configured to manage a database of electronic
4 records, first information provided by a user via from a graphical user interface configured to
5 enable users of the computer system to define operations by one or more database applications as
6 triggering conditions for application events monitored by the computer system and processing
7 that occurs when the application events are triggered, the first information defining an
8 application event that, upon occurrence, causes the computer system to intercept a database
9 transaction instantiated by one of the database applications with a database management system
10 of a database and generate[[s]] an electronic record that requires an electronic signature from
11 data identified in intercepted from a the database transaction an electronic record that requires an
12 electronic signature;
13 receiving, at the computer system, second information provided by the user via
14 the graphical from a user interface, the second information defining one or more fields for data to
15 be stored in the electronic record;
16 receiving, at the computer system, third information provided by the user via the
17 graphical from a user interface, the third information providing a mapping between that maps
18 data from underlying database tables associated with the database transaction to at least some of
19 the fields defined for data to be stored in the electronic record;
20 receiving, at the computer system, fourth information provided by the user via the
21 graphical from a user interface, the fourth information defining a layout that is applicable when
22 an electronic signature is collected for the electronic record for displaying data stored in the

23 electronic record on a computer display ~~when an electronic signature for the electronic record is~~
24 ~~collected;~~

25 receiving, at the computer system, fifth information provided by the user via the
26 graphical from a user interface, the fifth information identifying a signatory approver for the
27 electronic record;

28 in response to detecting the occurrence of the application event at the computer
29 system when the one of the database applications instantiates the database transaction associated
30 with the application event with the database management system of a database, automatically
31 generating the electronic record with the computer system from data intercepted from the
32 database transaction according to the mapping between the data from the underlying database
33 tables associated with the database transaction to the at least some of the fields in the electronic
34 record;

35 and displaying the electronic record using the computer system to the signatory
36 approver according to the defined layout in order to collect an electronic signature for the
37 electronic record;

38 receiving, at the computer system, an electronic signature from the signatory
39 approver for the electronic record; and

40 generating, by the computer system, sixth information associating the electronic
41 signature from the signatory approver with the electronic record prior to performing an action
42 with the computer system that results in committing the database transaction to [[a]] the database
43 associated with the database management system.

1 2. (Currently amended): The method of claim 1 further comprising verifying the
2 electronic signature at the computer system prior to associating the electronic signature with the
3 electronic record.

1 3. (Currently amended): The method of claim 2 wherein associating the
2 electronic signature with the electronic record comprise associating by the computer system the

3 electronic signature with the electronic record in response to a positive verification of the
4 electronic signature.

1 4. (Original): The method of claim 1 wherein the electronic signature comprises
2 a user id and a password.

1 5. (Currently amended): The method of claim 1 further comprising verifying the
2 electronic signature by the computer system and storing the electronic record with the computer
3 system in a common repository of electronic records that are generated from multiple data
4 sources.

1 6. (Original): The method of claim 5 wherein the electronic record comprises
2 unstructured data in a character large object (CLOB) format.

1 7. (Original): The method of claim 6 wherein the common repository is a
2 database and wherein the unstructured data is a well-formed XML document stored within a
3 column of a table stored in the database.

1 8. (Currently amended): The method of claim 1 further comprising:
2 receiving, at the computer system, seventh information provided by the user via
3 the graphical user interface, the seventh information specifying a set of business rules associated
4 with the application event;

5 determining, with the computer system, a business rule from the set of business
6 rules associated with the application event; and

7 executing the business rule with the computer system to determine whether an
8 electronic signature is required to connote review or approval of the electronic record when
9 execution of a rule results in a determination that an electronic signature is required, displaying
10 data from the electronic record on a computer display.

1 9. (Currently amended): A computer system that manages a database of
2 electronic records stored in a database, the computer system comprising:

3 a processor; and
4 a database; and
5 a computer-readable memory coupled to the processor, the computer-readable
6 memory configured to store a computer program;
7 wherein the processor is operative with the computer program to:
8 (i) receive first information provided by a user via from a graphical user
9 interface configured to enable users of the graphical user interface to define operations by
10 one or more database applications as triggering conditions for application events and
11 processing that occurs when the application events are triggered, the first information
12 defining an application event that, upon occurrence, causes the processor to intercept a
13 database transaction instantiated by one of the database applications with a database
14 management system of a database and generate[[s]] an electronic record that requires an
15 electronic signature from data identified in intercepted from a the database transaction an
16 electronic record that requires an electronic signature;
17 (ii) receive second information provided by the user via the graphical from a
18 user interface, the second information defining one or more fields for data to be stored in
19 the electronic record;
20 (iii) receive third information provided by the user via the graphical from a
21 user interface, the third information providing a mapping between that maps data from
22 underlying database tables associated with the database transaction to at least some of the
23 fields defined for the electronic record;
24 (iv) receive fourth information provided by the user via the from a user
25 interface, the fourth information defining a layout that is applicable when an electronic
26 signature is collected for the electronic record for displaying data stored in the electronic
27 record on a computer display when an electronic signature for the electronic record is
28 collected;
29 (v) receive fifth information provided by the user via the graphical from a user
30 interface, the fifth information identifying a signatory approver for the electronic record;

31 (vi) intercept data from the database transaction instantiated by the one of the
32 database applications with the database management system of a database to generate the
33 electronic record and display the electronic record to the signatory approver according to
34 the defined layout in response to detecting the occurrence of the application event, the
35 electronic record generated by the processor according to the mapping between the data
36 from the underlying database tables associated with the database transaction to the at
37 least some of the fields in the electronic record;

38 (vii) receive an electronic signature from the signatory approver for the
39 electronic record; and

40 (viii) generate sixth information that associates the electronic signature from the
41 signature approver with the electronic record prior to performing an action committing
42 the database transaction instantiated by the one of the database applications with the
43 database management system of a database to the database associated with the database
44 management system.

1 10. (Original): The computer system of claim 9 wherein processor is further
2 operative to verify the electronic signature.

1 11. (Previously presented): The computer system of claim 10 wherein processor
2 is operative to associate the electronic signature with the electronic record in response to a
3 positive verification of the electronic signature.

1 12. (Original): The computer system of claim 9 wherein the electronic signature
2 comprises a user id and a password.

1 13. (Original): The computer system of claim 12 wherein the processor is further
2 operative to verify the electronic signature and store the electronic record in a common
3 repository of electronic records that are generated from multiple data sources.

1 14. (Original): The computer system of claim 13 wherein the electronic record
2 comprises unstructured data in a character large object (CLOB) format.

1 15. (Original): The computer system of claim 14 wherein the common repository
2 is a database and wherein the unstructured data is a well-formed XML document stored within a
3 column of a table stored in the database.

1 16. (Previously presented): The computer system of claim 9 wherein the
2 processor is further operative to:

3 determine a business rule from a set of business rules associated with the
4 application event; and

5 execute the business rule to determine whether an electronic signature is required
6 to connote review or approval of the electronic record display data from the electronic record on
7 a computer display when execution of a rule results in a determination that an electronic
8 signature is required.

1 17. (Currently amended): A computer program product embodied on a
2 computer-readable storage medium configured to store a set of code modules which when
3 executed by a processor of a computer system cause the processor to manage a database of
4 electronic records stored in a database, the computer program product comprising:

5 code for displaying a graphical user interface configured to enable users of the
6 graphical user interface to define operations in one or more database applications as triggering
7 conditions for application events and processing that occurs when the application events are
8 triggered;

9 code for receiving first information provided by a user via the graphical from a
10 user interface, the first information defining an application event that, upon occurrence, causes a
11 database transaction instantiated by one of the database applications with a database management
12 system of a database to be intercepted and generates an electronic record that requires an

13 electronic signature to be generated from data identified in intercepted from a the database
14 transaction;
15 code for receiving second information provided by the user via the graphical from
16 a user interface, the second information defining one or more fields for data to be stored in the
17 electronic record;
18 code for receiving third information provided by the user via the graphical from a
19 user interface, the third information providing a mapping between that maps data from
20 underlying database tables associated with the database transaction to at least some of the fields
21 defined for data to be stored in the electronic record;
22 code for receiving fourth information provided by the user via the graphical from
23 a user interface, the fourth information defining a layout that is applicable when an electronic
24 signature is collected for the electronic record for displaying data stored in the electronic record
25 on a computer display when an electronic signature for the electronic record is collected;
26 code for receiving fifth information provided by the user via the from a user
27 interface, the fifth information identifying a signatory approver for the electronic record;
28 code for, in response to detecting the occurrence of the application event when the
29 one of the database applications instantiates the database transaction with the database
30 management system of a database, generating the electronic record from data intercepted from
31 the database transaction according to the mapping between the data from the underlying database
32 tables associated with the database transaction to the at least some of the fields in the electronic
33 record;
34 and code for displaying the electronic record to the signatory approver according
35 to the defined layout in order to collect an electronic signature;
36 code for receiving an electronic signature from the signatory approver for the
37 electronic record; and
38 code for generating sixth information associating the electronic signature from the
39 signatory approver with the electronic record prior to performing an action that results in

40 committing the database transaction to [[a]] the database associated with the database
41 management system.

1 18. (Previously presented): The computer program product of claim 17 further
2 comprising code for verifying the electronic signature.

1 19. (Previously presented): The computer program product of claim 18 wherein
2 the electronic signature comprises a user id and a password.

1 20. (Previously presented): The computer program product of claim 18 further
2 comprising code for storing the electronic record in a common repository of electronic records
3 that are generated from multiple data sources.

1 21. (Previously presented): The computer program product of claim 20 wherein
2 the electronic record comprises unstructured data in a character large object (CLOB) format.

1 22. (Previously presented): The computer program product of claim 21 wherein
2 the common repository is a database and wherein the unstructured data is a well-formed XML
3 document stored within a column of a table stored in the database.